May 9, 2016

Presented by: Minuteman High School Edward A. Bouquillon, Ph.D., Superintendent-Director

Arlington Town Meeting



Minuteman High School Building Project

Giving Students a Competitive Advantage in Today's Global Economy

A REVOLUTION IN LEARNING

Your Minuteman

- Established in 1970 as a Career and Technical High School to serve member towns
- Rigorous academic courses coupled with high-quality, industry-supported career and technical education
- This powerful combination gives graduates <u>a</u> competitive advantage in the new global economy



Features of this Project

- 628 Student Design Enrollment
- 257,745 Total Building Gross Floor Area
- \$119,200,892 Construction Budget
- \$144,922,480 Total Project Budget
- 44.75% Reimbursement of Eligible Costs
 - Eligible Costs defined in 963 CMR 2.16 Audit Procedures MSBA School Building Grant Program
- 30% Effective Reimbursement
- \$ 44.1 Million Dollar value of estimated reimbursement
- LEED Silver Certification



The Minuteman Project





The Need

Over the past 8 years, the District has invested nearly \$7 million in maintaining and repairing the building's mechanical systems, however.....

The New England Association of Schools & Colleges (NEASC) has placed our accreditation on "Warning" status *solely* due to the building's condition.



MSBA-Required Feasibility Study

- The (MSBA) required us to investigate all possibilities including a "repair only" option.
- Engineers and Architects developed estimates for repair, renovation, renovation/addition and new construction options for TWO sized schools (9 options).
- MSBA evaluated this preferred solution, the recommended enrollment and voted unanimously for the new school.
- Building a new school was the least cost option.



Summary of Preliminary Design Pricing for Final Evaluation of Options

Option (Description)	Total Gross Square Feet	Square Feet of Renovated Space (cost*/sf)	Square Feet of New Construction (cost*/sf)	Site, Building Takedown, Haz Mat Cost*	Estimated Total Construction ** (cost*/sf)	Estimated Total Project Costs
Option A: Renovation 435	258,683	233,168 \$434/sf	25,515 \$480/sf	\$8,697,166	\$122,143,261 \$472/sf	\$167,336,268
Option B: New 435	224,997	0 \$0/sf	224,997 \$448/sf	\$18,150,508	\$119,556,674 \$531/sf	\$143,468,009
Option C: Renovation 800	337,184	337,184 \$398/sf	0 \$0/sf	\$9,119,478	\$143,468,001 \$425/sf	\$196,551,161
Option D: Reno/Add 800	338,288	139,900 \$365/sf	198,388 \$506/sf	\$11,492,199	\$162,871,611 \$481/sf	\$218,247,959
Option E: New 800	323,537	0 \$0/sf	323,537 \$441/sf	\$18,195,397	\$160,793,182 \$497/sf	\$192,951,818
Option F: Renovation 628	305,808	305,808 \$394/sf	0 \$0/sf	\$8,886,780	\$129,223,980 \$423/sf	\$176,547,602
Option G: Reno/Add 628	284,512	123,491 \$348/sf	161,021 \$482/sf	\$10,646,439	\$131,310,459 \$462/sf	\$175,333,834
Option H: New 628***	242,893	0 \$0/sf	242,893 \$428/sf	\$17,507,727	\$121,392,277 \$500/sf	\$144,922,145



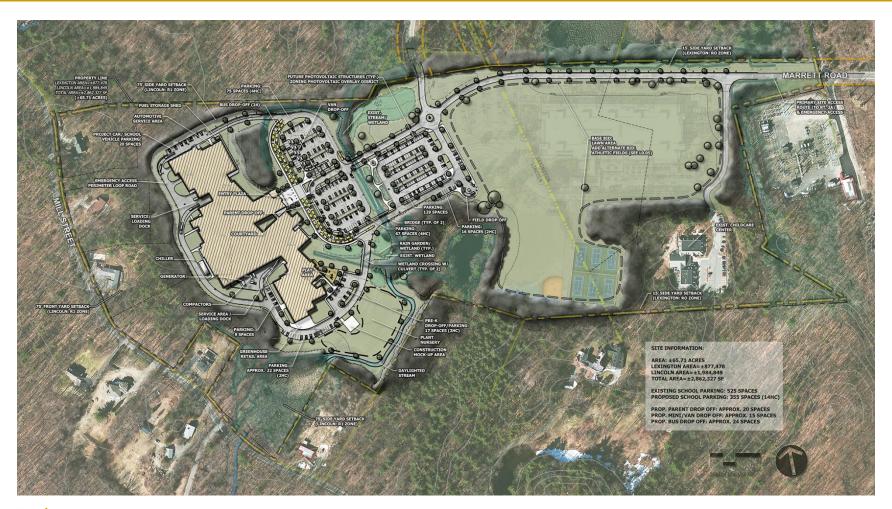
^{*} Marked up construction costs ** Does not include construction contingency ***Preferred option

Project Goals

- Implement a research based, data driven Academy
- Protect accreditation by addressing multiple outdated building code and access issues
- Provide a facility that motivates students to find their passion and purpose
- Intensify CVTE programming within an innovative educational plan
- Create a campus that is attractive, compelling and affordable



The NEW Minuteman Campus





Engineering, Construction & Trades Academy
Advanced Manufacturing & Metal Fabrication 48.0501 / 48.0599
Automotive

Shared Services & Programs

Life Sciences & Services Academy

47.0604

Carpentry 46.0201

Design & Visual Communications 50.0401

> **Electrical** 46.0302

Multi-Media Engineering 09.0701

> **Plumbing & HVAC** 46.0603 / 47.0201

Programming & Web Development 11.0201

Robotics Engineering Automation 15.0000 / 15.0403

Nursing & Wellness Services Library & Media Center Special Education

Common Planning Time

Academic Programs

Chemistry Science Physics English Language Arts **Mathematics**

Humanities Art & Music Guidance Counseling **Career Development Physical Education Advanced Placement**

Common CVTE Competencies

Health & Safety Entrepreneurship Financial Literacy

Digital Literacy Career Guidance Work based Learning **Internships & Coop**

Reading Consultancy Student Portfolios Executive Purpose Project Based Learning **Culinary Arts & Hospitality** 12.0500 / 52.0901

> Cosmetology 12.0404

Early Education & Care 13.1210

Health Occupations 51.0000

Environmental Science 15.0507

> **Biotechnology** 15.0401

Horticulture & Landscaping Tech 1.0601

Academy Design Considerations

- Small School with Flexible areas
- Similar Curricula Contiguous
- Resources Shared
- Collaborative Applied Learning Spaces
- Practical Sustainability Throughout
- Support Workforce Education Priorities
- "Real World" Project Based Learning
- Enhance Support for ALL Students

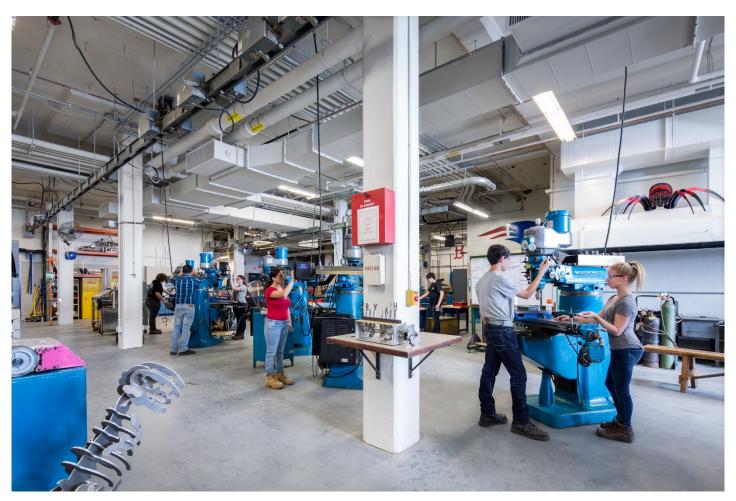


Modern Technical Labs





Meeting all Industry Standards



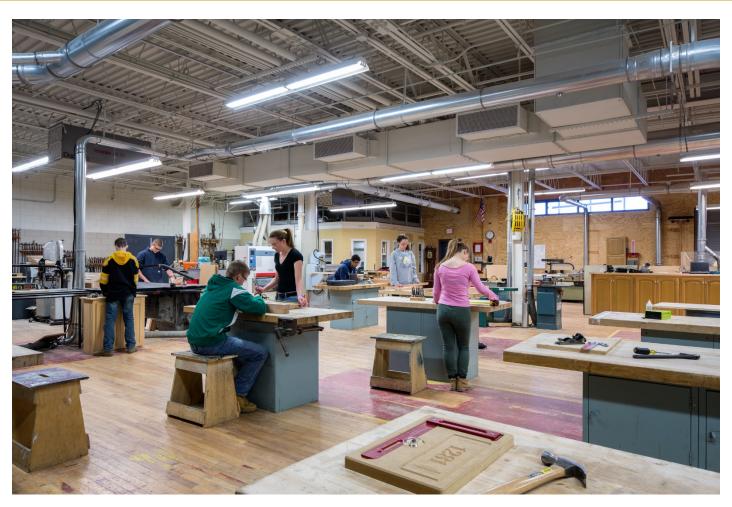


Professional Services Provided





Contemporary State of the Art



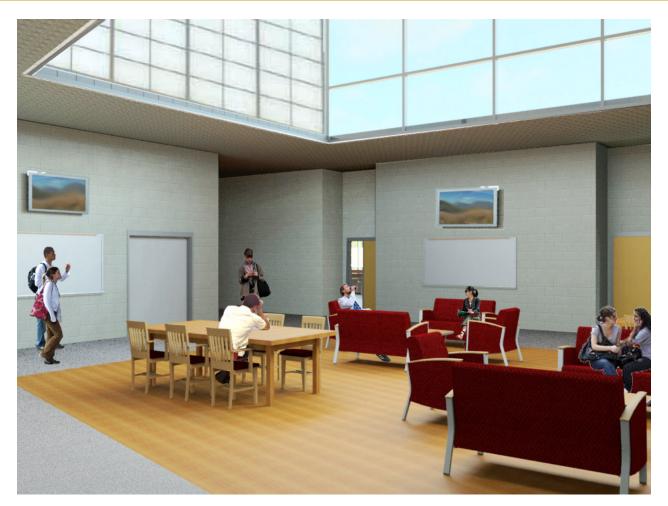


Natural Light in all Classrooms





Collaborative & Project Based



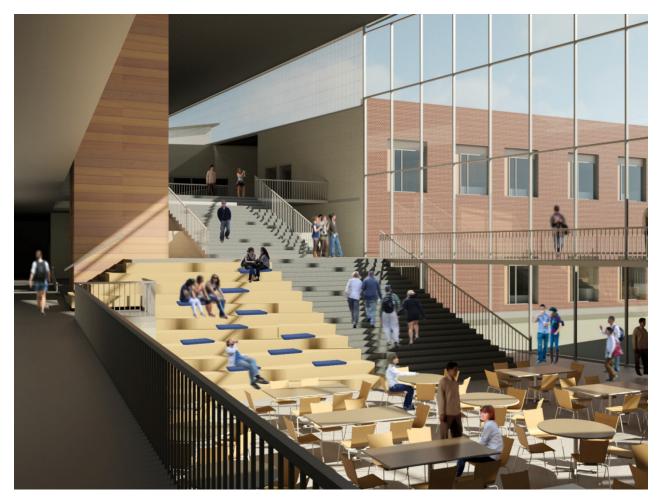


Student Managed Restaurant and Public Meeting Spaces





Giving Students Their Space





High Quality Career and Technical Vocational High Schools

- These are larger than a traditional high school.
- Vocational technical high schools require more complex and distinctive learning spaces.
- Square footage must include all regular High School spaces <u>PLUS</u> Chapter 74 Career and Technical Education shop areas.
- Cost per SQ FT is higher and this project is comparable.



Minuteman has more expenses than a Traditional High School

- Staffing and Salaries
 - -Full Vocational Technical Faculty
 - -Full Academic Faculty
 - -Special Education Staff
 - -Metro West Salary Scale
- Transportation costs are substantial due to District's geography.
- Special Education population highest.



Why Enrollment will increase

- Applications are up 15% from member towns (data)
- Increasing elementary enrollment in member towns (data)
- Increasing interest in Career and Technical Education confirmed by district Guidance staff (survey)
- DAPA Research Survey Shows Support (survey)
- Return on Investment of CVTE becoming clear



Guidance Counselors See Increasing Demand

- 81% agreed that perceptions about vocational-technical education seem to be improving
- 76.2% felt parents would be more willing to send their children to a vocational-technical school during next five years
- 71.4% felt students in their town would be more willing to apply



Guidance Counselors See Increasing Demand

- 85.7% felt students in vocational-technical education have a competitive advantage when they look for jobs
- 61.9% felt voc-tech students had a competitive advantage when going to college
- 100% felt high-quality vocational-technical education programs provide a good foundation for a 4-year college degree



Project Costs are in Line with Other New Vocational Technical Schools

DATE COMPLETE OR TO BE COMPLETED	TOTAL COST	\$/SQ FT*
Worcester Vocational Technical High School	\$90,000,000	\$705.00
February 2006		
Putnam (Springfield) Voc-Tech High School	\$124,000,000	\$567.00
July 2012		
Essex Agricultural and Technical High School	\$134,501,368	\$477.00
June 2014		
Minuteman Regional Voc-Tech High School	\$144,922,480	\$562.00
Spring 2020		
		* Today's Dollars



The Cost of Doing Nothing

- We will lose up to \$44.1 million in state funds.
- We lose millions of dollars in capital fees from nonmember towns.
- Our school's accreditation could be lost.
- Uncertainty will hurt enrollment, driving up per pupil costs to member communities.
- We will still need to spend \$106 million in repairs triggered by existing code dependent thresholds.
- We will make these repairs without state dollars.



The Cost of Doing Nothing

- Renovations that exceed 30% of assessed building value within 3 years require entire building be compliant with current ADA code
 - Assessed value = \$25M x 30% = \$7.5M
- Building Sprinkler system is required if renovations exceed \$8.2M
- Renovation Project will require multiple bonding requests from Town Meetings over the next 5 to 7 years



New Construction

Non MSBA Renovation

30.46% MSBA net reimbursement

\$100M Net Cost offset by Capital Fee

2.5 years of new construction

No displacement of students

A not-to-exceed cost

Right-sized new building

Controlled operating costs resulting from a smaller, more efficient building

Attract NEW member towns

New programs in modern building

Certainty for students, parents and member towns

100% cost to District

\$106M Gross Cost with NO Capital Fee

Up to 10 years of construction

Continual disruption and displacement

Unknown costs and uncertain timeline

Building too large and not adaptable

Uncertain (higher?) operating costs in a 1970s renovated building

Little interest in new members

Building not designed for Academies

Uncertainty



Process to Renovate 1970's Building

- Would need to begin Feasibility Study for renovation project
 - Disregard current 3 year feasibility study
 - Start over with new design team
- No MSBA funding or Capital Fee funded 100% by member towns
 - Capital fee for nonresident students only applies to MSBA projects
- Potential cost increases due to unanticipated existing conditions



New School: Costs and Tax Impacts

- Total Project: WILL NOT exceed \$144.9M
- State Share: 44.75% of "eligible" costs
- "Net" state reimbursement: 30.46%
- State reimbursement: Up to \$44.1 million
- Annual tax impact on median homeowner:

\$17.50 to \$116.93



Cost Impact FY20 – Arlington

Projected Annual Debt Assessment \$1,262,192

Estimated tax impact to the Median Homeowner

\$ 75.19



Next Steps

- July 2016: Appoint a "Construction Manager at Risk" to prepare construction documents, and put the project out to bid.
- August 2017: Start construction.
 (Minuteman students stay in the existing building while the new school is under construction.)
- September 2020: Open new school to students.



Why We Need to Act

- Build a modern facility that meets current building codes and access requirements
- Create an innovative Career Academy model to enhance student learning and meet changing labor market needs
- Preserve a \$44 million construction grant from the MSBA
- Protect the school's accreditation



A Vision for Our Future





Invest in Our Students' Future

"These schools are a pathway to a brighter future.

The skills they teach are widely in demand, and many of them are already well plugged into the job creators in their communities.

In an age when too many people are struggling to find work that pays well, these schools have so much to offer, and we should help them make that happen."

Massachusetts Governor Charlie Baker State of the Commonwealth, January 21, 2016

